



## ANNUAL WATER QUALITY REPORT FOR YEAR 2005

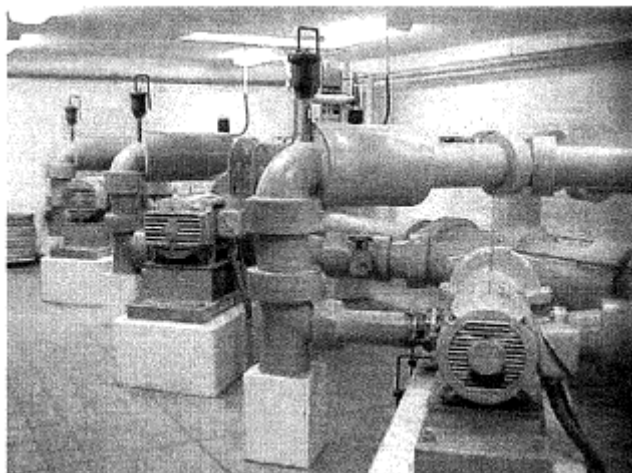
We are pleased to present this year's Annual Drinking Water Quality Report. This report is intended to inform you about the quality of the water provided to approximately 7,105 customers in the past year of 2005. It includes details about where your water comes from, what has been detected in your water and how it compares to regulatory standards.

The information enclosed is based on the testing conducted in the year 2005. Every year testing occurs, testing for the year 2006 will be available in the next annual report. The Franklin Water Utility is committed to providing you with the highest quality drinking water that meets and exceeds standards more stringent than federal and state requirements. Please read this brochure for additional information.

### WATER QUALITY REGULATORY STANDARDS

In 1997, the Franklin Water Utility began purchasing water from the Oak Creek Water and Sewer Utility (OCWS). From a quality side, the OCWS has been producing some of the highest quality water in the nation. Thousands of water quality tests are conducted annually to ensure the tap water has met and exceeded all federal and state drinking water health standards. From a quantity side, both Oak Creek and Franklin distribution systems are being reinforced for more reliability.

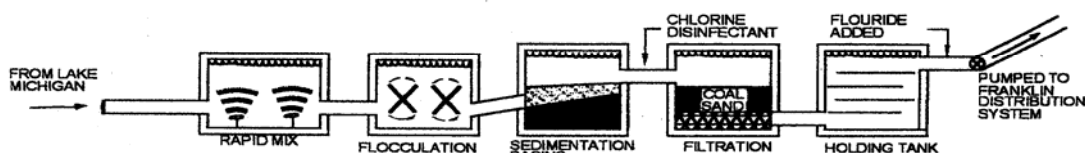
The Franklin Water Utility receives the water from the city limits, distributes throughout the City and provides storage to meet peak demands. Water quality tests are conducted within its distribution system as well as in homes and businesses throughout the City. The Franklin Water Utility is committed to protecting the public health around the clock by ensuring the cleanest, safest drinking water possible to its customers. This is accomplished with water production by the Oak Creek Water Utility and distribution by highly trained and dedicated employees in the Franklin Water Utility.



### WATER RATE

The quarterly cost for a single-family residential account in the City of Franklin was increased by 2% in 2005. An increase in the wholesale water rate from the Oak Creek Water & Sewer Utility was a primary reason that necessitated this increase. The old water rate was \$2.87 per thousand gallons, the new water rate is \$2.93 per thousand gallons.

### FLOW CHART OF THE TREATMENT OF FRANKLIN WATER



## **SOURCES OF FRANKLIN'S DRINKING WATER**

The source of Franklin's drinking water is from Lake Michigan, a surface water source. Water is purchased from the Oak Creek Water Utility which treats and then pumps water from Lake Michigan to the Franklin city limits. The Franklin Water Utility then provides the water to its customers through distribution mains and provides storage to meet peak demands. The western portion of the City's water system is lifted by a booster pumping station located at 5800 W. Drexel Avenue. Water quality tests are conducted within its distribution system as well as in homes and businesses throughout the city.

Franklin switched from ground water to lake water in 1997 to provide customers with higher quality drinking water. Prior to the switch, radium levels in excess of government standards were found in the Franklin ground water well system, for which customers were notified. Franklin's well system now is used only as a backup during periods of high usage. Less than 1 percent of the sampled water supplied by the utility comes from groundwater.

As water flows through rivers and lakes and over land surfaces, naturally occurring substances may be dissolved into the water. Animals and human activities also may affect the water. These substances then are called contaminants. Surface water sources may be susceptible to contaminants. For example, the following contaminants might exist in "untreated" water: inorganic contaminants, such as salts and metals; biological contaminants, such as viruses, protozoa and bacteria; organic chemicals from industrial or petroleum use; pesticides and herbicides; and radioactive materials. To ensure tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems.

Drinking water – including bottled water – may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does *not* necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791.

## **SPECIAL HEALTH INFORMATION AVAILABLE**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Infants and young children also are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than others in the community because of materials used in your home's plumbing system. If you are concerned about elevated lead levels in your home's water, you may have your water tested and flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791. Please note that lead levels of water supplied to homes and businesses by the Franklin Water Utility are well within governmental safety standards.

## **CUSTOMER QUESTIONS WELCOME**

Numerous opportunities exist to learn more about the Franklin Water Utility and water quality. If you have questions about drinking water quality, this report or water commission meetings, please call the Engineering Department at (414) 425-7510. Further information can be obtained by visiting the Oak Creek Water & Sewer website at [www.water.oak-creek.wi.us](http://www.water.oak-creek.wi.us) or by visiting the City of Franklin website at [www.franklinwi.gov](http://www.franklinwi.gov).

## **TREATED WATER QUALITY**

Listed below are contaminants detected in Franklin's drinking water during 2005. All detects are less than federal and state regulations allow. Not listed are the nearly 3,000 tests conducted for approximately 150 contaminants that were not found during water testing.

The state allows the Franklin Water Utility to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

## **How to Read the Annual Franklin Water Quality Report**

1. Read the definitions below the contaminants tables to understand this report.
2. Choose a "Contaminant" on the chart.
3. Check the "Ideal Goal" (Maximum Contaminant Level Goal) for that substance.
4. Note the "Highest Level Allowed" (Maximum Contaminant Level).
5. Compare the contaminant "Level Detected" in Franklin's water supply to the Ideal Goal and the Highest Level Allowed.

# ANNUAL FRANKLIN WATER QUALITY REPORT

## INORGANIC CONTAMINANTS

CONTAMINANT (units)	MCL (Highest Level Allowed)	MCL G (Ideal Goals)	LEVEL DETECTED	LAST DETECTED DATE (if prior to 2002)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Barium (ppm)	2	2	.019		NO	Natural deposits.
Cadmium (ppb)	5	5	.3	11/11/96	NO	Natural deposits. Corrosion of galvanized pipes. Metal refinery discharge; waste, batteries and paint runoff.
Chromium (ppb)	100	100	1 ppb		NO	Natural deposits. Steel and pulp mill discharge.
Copper (ppm)	AL=1.3	1.3	0.35 Range .0059-.52		NO	Natural deposits. Corrosion of household plumbing. Leaching from wood preservatives.
Fluoride (ppm)	4	4	1 ppm (ave) Range .1-1.2 ppm		NO	Natural deposits. Water additive, which promotes strong teeth. Fertilizer and aluminum factory runoff.
Lead (ppb)	AL=15	0	3.6 ppb Range: nd-5.9ppb		NO	Natural deposits. Corrosion of household plumbing.
Nickel	100	100	1.4 ppb		NO	Natural deposits.
Nitrates (ppm)	10	10	0.59 ppm		NO	Natural deposits, fertilizer, animal waste, sewage.
Sodium (ppm)	n/a	n/a	15.		NO	Erosion of natural deposits.
Sulphates	n/a	n/a	25.			Natural deposits.
HAA5	60 ppb	60 ppb	17 ppb (avg) Range 6-29		NO	By product of drinking water disinfection

## RADIOACTIVE CONTAMINANTS

CONTAMINANT (units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	RANGE	LAST DETECTED DATE (if prior to 2002)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Gross Alpha, excl. R&U (pCi/l)	15 pCi/l	0	0.1 Range 0-.1	.nd - .1		NO	Natural deposits.
Gross Beta particle activity (pCi/l)	n/a	n/a	4.0 pCi/l			NO	Natural and man-made deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l.
Radium (226+228) (pCi/l)	5	0	.9	.9		NO	Natural deposits.

\*Each contaminant range is from no (or zero) detect to the maximum reported value.

## UNREGULATED CONTAMINANTS

CONTAMINANT (units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	LAST DETECTED DATE (if prior to 2002)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Bromodichloro – methane (ppb)	n/a	n/a	6.29 ppb Range 3.3-9.8		NO	By-product of drinking water disinfection
Bromoform* (ppb)	n/a	n/a	.31 (avg.) Range .2-.56 ppb		NO	By-product of drinking water disinfection
Chloroform (ppb)	n/a	n/a	10 ppb (avg.) Range 3.1-25 ppb		NO	By-product of drinking water disinfection
Dibromochloro- methane (ppb)	n/a	n/a	2.84 ppb (avg.) Range 1.5-4.7 ppb		NO	By-product of drinking water disinfection
Trihalomethane	80 ppb	0 ppb	25 ppb (avg.) Range 10.6-40		NO	By-product of drinking water disinfection
Turbidity	n/a	TT= 1 NTU Tt< 0.3 NTU 95% of the time	0.08 NTU		NO	Natural Sediment

## VOLATILE ORGANIC CONTAMINANTS

CONTAMINANT (units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	RANGE	LAST DETECTED DATE (if prior to 2002)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
TTHM (ppb)	100	0	26 (avg.)	16.64- 37.99		NO	By-product of drinking water chlorination.

### DEFINITIONS

**AL = Action Level:** The concentration of a contaminant that triggers treatment or other requirements, which a water system must follow.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant allowed by law in drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected health risk.

**mrem/year:** millirems per year (a measure of radiation absorbed by the body).

**NTU = Nephelometric Turbidity Units:** a measurement unit of turbidity, or water cloudiness, which is a good indicator of water quality.

**pCi/l:** Picocuries per liter (a measure of radioactivity).

**ppm:** Parts per million.

**ppb:** Parts per billion.

**TT = Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

**Trihalomethanes:** chloroform, bromochloromethane, dibromochloromethane and bromoform.

\* Each contaminant range is from no detect (nd) to the maximum reported value.

## FRANKLIN WATER UTILITY SERVICE AREA

